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-* Verizon Settles 'Super Cookies' Case *-
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->From the Editor's Keyboard

"Saying it like it is!"

"-----"

Spring is definite coming! The temps reached 70 degrees and higher here this past week, and will remain above normal for the foreseeable future. Daylight Savings Time for most of the country this week also is a factor telling us that winter is just about over - not that we had much of one anyway (thankfully!).

It looks like our web site guru, Rob Mahlert, has finally found the problem(s) with our mailing list and web site. Appears that during the physical move of the server that houses all of the A-ONE data, the cooler bit the big one and needed replacement. All appears okay, at least for the most part, and at the present time. We'll continue to monitor things!

The "drama" continues as far as the U.S. political scene is concerned. While Hillary has a good lead against Bernie on the Democrats side, the GOP is looking for any way possible to derail the Trump campaign. Our political system hard at work!

Until next time...

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Firebees - Scheduled Delivery Date of the 2nd Series

End of last week Medusa Computer Systems got the final delivery date ultimately confirmed by the assembling company. The FireBee PCBs of the 2nd series will be supplied to MCS at the 30th of May 2016.

Subsequently the computers will receive a final inspection and testing in Switzerland and will be mounted into the mini-cases and in the order of the preorders piecemeal delivered to you. We will personally come forward to all preordering persons in about 4 to 8 weeks and ask for the final orders (including a CF-Card, if necessary PSUs, etc.) and will request the payment of the computers.

As a matter of course FireBees can furthermore be preordered by

you, as we like as at the first series sent far more boards into production than there got preordered.

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->In This Week's Gaming Section - Microsoft Proposes Closing Lionhead Studios!

PS4 3.50 Update Revealed!
Internet Archive Classic Apple II Games!
And more!

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->A-ONE's Game Console Industry News - The Latest Gaming News!

Microsoft Cancels Fable Legends and Proposes Closing Lionhead Studios

Microsoft has delivered some unexpected bad news today.

The game publisher and hardware maker announced today that it is canceling Fable Legends, the next installment in the fantasy series that has been an Xbox staple since its debut in 2004. Microsoft also said that it has proposed completely closing Fable developer Lionhead Studios. This could mark the end of one of the most iconic developers in the \$99.3 billion global game industry (based on market researcher Newzoo's estimates).

Lionhead's community manager was assuring fans on Fable Legends message board that the game was coming just earlier today.

Microsoft also announced that it is closing Press Play Studios, which developed games Max: The Curse of Brotherhood and Kalimba. It was working on Project Knoxville, a multiplayer survival game.

These have been tough decisions and we have not made them lightly, nor are they a reflection on these development teams we are incredibly fortunate to have the talent, creativity and commitment of the people at these studios, Microsoft Studios Europe general manager Hanno Lemke noted. The Lionhead Studios team has delighted millions of fans with the Fable series over the past decade. Press Play imbued the industry with a unique creative spirit behind games like Max: The Curse of Brotherhood and Kalimba, which both captured passionate fans. These changes are taking effect as Microsoft Studios continues to focus its investment and development on the games and franchises that fans find most exciting and want to play.

Fable Legends, which was announced in 2013, seemed to be far in

development. It was a multiplayer-focused take on the series. An open beta for the free-to-play game was supposed to come out this spring. *Fable Legends* was in a closed beta.

Lionhead revealed on its site that it will refund players who spent money on the closed beta, which won't go offline until April 13.

Lionhead Studios is one of the more storied studios in video games. One of its major creative forces was Peter Molyneux, who left the company in 2012 to start his own studio, 22Cans. Molyneux helped bring about the god-game genre (where the player helps guide the development of an entire world) with *Populous*, and he took that experience to Lionhead, whose first game was the god-simulator *Black and White* in 2001. Microsoft has closed notable studios before, including Ensemble, which created the real-time strategy series *Age of Empires* and the first *Halo Wars*.

This is a lot of bad news coming out of Microsoft, whose Xbox One console has trailed its chief competitor, the PlayStation 4, in sales. We don't know exactly what Microsoft means when it says that it wants to focus its investment and development on the games and franchises that fans find most exciting and want to play or how exactly that resulted in *Fable Legends* cancellation, a game that Microsoft has often displayed at industry events like the Electronic Entertainment Expo. While it was never as big as a *Halo* or *Gears of War*, *Fable* was nonetheless a recognizable console exclusive franchise for Xbox.

PS4 3.50 Update Revealed, Includes Appear Offline Feature

Sony has revealed key details of an upcoming 3.50 firmware update set to deploy soon to PS4.

Among other features, the major patch will introduce the long-requested feature of appearing offline whilst connected to the PlayStation Network.

Also added to the feature list is Remote Play on PC or Macs, which - as previously announced - will allow players to connect their PlayStation 4 with a desktop computer within the same home network; then play PS4 games on another screen or in another room in the house.

Sony said it will begin rolling out 3.50 update to beta users shortly.

Previously, Remote Play was a feature that only worked on PlayStation Vita, the micro-console PlayStation TV, and an assortment of Sony smartphones.

The beta for the 3.50 update, codenamed Musashi, will roll out soon to select customers, Sony said. An official release date has yet to be announced.

Patch notes for the 3.50 system software, as written by Sony marketing exec John Koller, can be found below.

Friend Online Notification - Want to know the moment your friends come online? With this update, you can, as we've added an option to be notified when members of your friends list sign on the network.

Appear Offline - Sometimes you want to play a game or watch a movie without being bothered by friends. Now it's easier to go incognito as we've added the option to appear offline. You can designate if you would like to appear offline when you log-in or at any time from your Profile or the Quick Menu.

User Scheduled Event - Time for a play date! We've added the ability to schedule a future gameplay session with your friends on the system. When your event starts, users who registered for the event will automatically be added to a party so you can start playing right away.

Play Together - This features allows all members of a Party to see what each person is playing so that you can easily join a friend's game, or start a new game together.

Remote Play (PC/Mac) - We're bringing PS4 Remote Play to Windows PC and Mac. This feature won't be available to test in the beta, but you can look forward to it soon.

Dailymotion - With this update, you'll be able to live stream directly to Dailymotion on PS4. We'll also support archiving live broadcasts, like we do for other streaming services.

Internet Archive Brings Hundreds of Classic Apple II Games to Your Web Browser

The Internet Archive has been on a roll lately, bringing back classic MS-DOS games, Windows 3.1 software, and even defanged versions of old PC viruses.

Now, the site has hit a milestone with its Apple II collection: A group of anonymous hackers have successfully broken the elaborate copy-protection schemes on more than 500 classic games and programs. The result is that these Apple II classics are now playable directly in modern web browsers.

It's worth noting that Archive.org's Apple II collection already spanned thousands of titles yes, including Number Munchers before hitting this milestone. But as archivist Jason Scott explains in a blog post, a subset of these programs have proven particularly troublesome to preserve in their original form.

Off the shelf, the programs would include copy protection routines that went so far as to modify the performance of the floppy drive, or force the Apple II's operating system to rewrite itself to behave in strange ways, Scott wrote.

The difficulty of cracking these schemes meant that hackers would sometimes omit parts of the code, or embed crack screens or alternate color schemes as a way of putting a personal stamp on their work. They also tended to focus entirely on popular arcade games rather than obscure software.

Archive.org's 4am collection (4am being a term for anonymous persons) attempts to preserve a wide swath of Apple II software in its original form. The site then uses its JavaScript-based emulator to run these games and programs directly in the browser. Each of these offerings include elaborate descriptions from the hackers on how they overcame the disk's copy protection.

To play the games, you need a modern browser such as Firefox or Chrome, with JavaScript enabled. Most games are playable with a keyboard, though it may take some experimentation to figure out the key mappings.

Why this matters: As with the Internet Archive's DOS and Windows libraries, the Apple II catalog includes popular fare like Pac-Man and Arkanoid, but also plenty of titles so obscure that they'd surely be lost without efforts to run them on modern hardware. The anonymous hackers behind the 4am Collection are doing important work, even if it wades into legally murky territory.

Tyrannosaur Tex Unreleased Game Boy Color Title Acquired by Piko Interactive

Piko Interactive have just announced that they have acquired an unreleased Game Boy Color title - Tyrannosaur Tex. Tyrannosaur Tex is a first person shooter. For the Game Boy Color. Let that sink in for a moment. Back in the late 90's, Eidos Interactive had this little title in development over at Slitherine (no idea), due for release in late 2000. That release never happened. Now, Piko Interactive have set in motion their plans to correct that little misunderstanding between Eidos and fans.

There are not a lot of first person shooters on the Game Boy Color - can you name five? How about three? Yeah, it is that rare. This is as ambitious now as it was 16 years ago. I am confident that Piko Interactive will come through as they do this for a living (just look at our other articles on them).

Piko Interactive had this to say about their latest acquisition, We want that IP to be one of the significant Piko intellectual properties such as Dorke and Ymp.

The story behind Tyrannosaur Tex is something along the lines of you playing as a gunslinger in the Texan town of Eastwood. There is a spaceship crash near town and it is not good. The spaceship was full of sinister robots who are hell bent on taking over the Earth. These robots start replicating and even resurrect dinosaurs and even create hybrids with them. This is not good, folks.

Somehow, Slitherine fit nearly 30 levels and a two player deathmatch mode into Tyrannosaur Tex. On a Game Boy Color. There is stereo sound, about 10 levels of scaling and an amazingly high 16 objects on the screen at once. The engine runs at about 20 to 30 frames per second and there are about 100 high color intermission screens according to our friends over at Unseen64.

The cool thing is, Piko plan on finishing the Tyrannosaur Tex and possibly porting it to PC and other platforms (no word on what those platforms could be- maybe Dreamcast?). Current release is hopefully by 2017.

Keep an eye on Retro Gaming Magazine for more news on Tyrannosaur Tex on the Game Boy Color. For more on Piko Interactive and their games, they cover many platforms, head over to their site.

Don t have a Game Boy Color? Grab one on Ebay and get ready for this cool game!

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A-ONE's Headline News
The Latest in Computer Technology News
Compiled by: Dana P. Jacobson

FCC Proposes New Broadband-privacy Rules and Your ISP Probably Hates Them

Your Internet provider wouldn t be able to sell information gleaned from your browsing history to advertisers. And it would have to alert you promptly if it suffered a data breach that compromised your info.

Those are just some of the rules Federal Communications Commission chairman Tom Wheeler has proposed for limiting your ISP s ability to auction off your personal information. But a lot would need to happen before those proposals become a reality of enforceable regulations.

Wheeler can make these proposals because last year s reclassification of Internet providers (ISPs) as common carriers not only subjected them to net-neutrality rules but also put them under the same privacy regime as phone and cable companies.

The chairman is doing this because he sees an imbalance between how much data your Internet service can collect it can see all of your unencrypted traffic plus the domain names of encrypted sites and how little freedom you have to ditch that company if you don t appreciate its conduct.

Once you subscribe to an Internet service provider for your home or for your smartphone you have little flexibility to change your mind or avoid that network, Wheeler wrote in a Huffington Post essay.

Firing your residential broadband provider remains a fantasy for the millions of Americans, who have only one high-speed service option at their homes. It s considerably easier to fire your wireless service, thanks in part to moves by the FCC such as forcing carriers to let you take your phone number with you when you switch but also due to the death of the traditional two-year

contract.

The first part of Wheeler's proposal as outlined in a three-page PDF covers who gets to see the information that your Internet provider unavoidably collects each time you click on a link, type in a Web address or receive new e-mail. They include:

Your Internet provider needs no permission to use information about your usage to provide a working connection (duh) and to sell you upgrades to it. So if you were hoping that this proposal would do away with data caps, sorry, it won't.

Your Internet provider can also use your data to try to sell you other communications-related services, and so can its affiliates but it must let you opt out of such marketing. On a call with reporters Thursday, a senior FCC official explained that this plank would, for example, let Verizon try to get you to sign up for Verizon Wireless.

Your Internet provider would have to get your agreement to use your data for any other purpose, most definitely including ads matched up with your browsing history.

Wheeler would also require Internet providers to protect customer data against theft or accidental exposure. If yours failed in that task and a data breach resulted, it would have to notify the FCC within seven days of learning about the breach, and notify you in another three days. Today, no such deadlines apply nationwide.

A frosty reception

This proposal, to be voted on at the FCC's March 31 meeting, is not enormously radical or even new.

The law giving the FCC this privacy mandate just turned 20 years old, and the commission has already put it to work in its case against Verizon Wireless for that carrier's supercookie tracking of customers' unencrypted Web traffic.

But even under the new rules, Internet providers could still sell ads targeted at their customers' Web use they'd just have to ask upfront. As Wheeler's Huffington Post piece said: This isn't about prohibition; it's about permission.

Verizon and AT&T, among others, didn't wait for Wheeler's proposal to come out before decrying new privacy rules as yet another instance of the regulatory state strangling innovation while letting Google, Facebook and the rest of the Internet market your data to their advertisers.

(Not all ISPs joined in: For example, Dane Jasper, CEO of the Bay Area's Sonic, endorsed Wheeler's proposal in an e-mail as a great step forward.)

It's true that search engines and social networks know a lot about me. But it's also true that I choose to give them that information in return for free services I find useful or entertaining; that I can limit or stop my use of those sites with far less effort than it would take to dump my wired or wireless provider; and that I can download my data and then delete it from their servers.

Big-name Internet providers, meanwhile, have followed another path seen at its worst when Verizon chose to launch that supercookie program without even telling its customers about it, much less letting them decline its surveillance. If that kind of precedent doesn't make you trust these companies to regulate themselves, the blame is all on their end.

Verizon To Pay \$1.35 Million To Settle FCC Investigation Over 'Super Cookies'

The FCC said Verizon will pay a \$1.35 million fine and adopt a three-year compliance plan as part of a settlement related to the carrier's use of "super cookies."

Both Verizon and AT&T have used super cookies, a technology that involves inserting an undetectable and undeletable tracking ID into their subscribers' mobile Internet browsing activity. Both programs were disclosed in August 2014, although the FCC said it had determined that Verizon had been using super cookies as early as December 2012.

AT&T stopped using the technology in November 2014, but Verizon continued the program, finally allowing users to opt out in April 2015. The FCC said Verizon has agreed to notify its customers about its targeted advertising programs and will obtain users' opt-in consent before sharing data from super cookies with third-party partners.

The technology has been dubbed a super cookie because it is more powerful than a typical Web tracking cookie that users can delete. Super cookies are unique identifier codes that are attached to each website customers visit, creating a profile of their browsing histories.

The FCC noted that Verizon had asserted in 2014 that third-party advertising companies were unlikely to use super cookies to build consumer profiles or for other marketing purposes. But news reports in January 2015 claimed that a Verizon partner had used super cookies for unauthorized purposes, effectively overriding customers' privacy choices.

"Consumers care about privacy and should have a say in how their personal information is used, especially when it comes to who knows what they're doing online," FCC Enforcement Bureau Chief Travis LeBlanc said in a prepared statement. "Privacy and innovation are not incompatible."

Mac Ransomware Caught Before Large Number of Computers Infected

The first known ransomware attack on Apple Inc's Mac computers, which was discovered over the weekend, was downloaded more than 6,000 times before the threat was contained, according to a developer whose product was tainted with the malicious software.

Hackers infected Macs with the "KeRanger" ransomware through a tainted copy of Transmission, a popular program for transferring data through the BitTorrent peer-to-peer file sharing network.

So-called ransomware is a type of malicious software that restricts access to a computer system in some way and demands the user pay a ransom to the malware operators to remove the restriction.

KeRanger, which locks data on Macs so users cannot access it, was downloaded about 6,500 times before Apple and developers were able to thwart the threat, said John Clay, a representative for the open-source Transmission project.

That is small compared to the number of ransomware attacks on computers running Microsoft Corp's Windows operating system. Cyber security firm Symantec Corp observed some 8.8 million attacks in 2014 alone.

Still, cyber security experts said they expect to see more attacks on Macs as the KeRanger hackers and other groups look for new ways to infect Mac computers.

"It's a small number but these things always start small and ramp up huge," said Fidelis Cybersecurity threat systems manager John Bambenek. "There's a lot of Mac users out there and a lot of money to be made."

Symantec, which sells anti-virus software for Macs, warned on its blog that "Mac users should not be complacent." The post offered tips on protecting against ransomware. (symc.ly/1puolix)

The Transmission project provided few details about how the attack was launched.

"The normal disk image (was) replaced by the compromised one" after the project's main server was hacked, said Clay.

He added that "security on the server has since been increased" and that the group was in "frequent contact" with Apple as well as Palo Alto Networks, which discovered the ransomware on Friday and immediately notified Apple and Transmission.

An Apple representative said the company quickly took steps over the weekend to prevent further infections by revoking a digital certificate that enabled the rogue software to install on Macs.

Transmission responded by removing the malicious 2.90 version of its software from its website (www.transmissionbt.com). On Sunday, it released version 2.92, which its website says automatically removes the ransomware from infected Macs.

Forbes earlier reported on the number of KeRanger downloads, citing Clay.

Adobe has released emergency security updates for Flash Player to address critical vulnerabilities that may open the door to a system breach.

Version 21.0.0.182 is crucial for users of basically any PC or mobile device, and should be downloaded immediately. The patch, according to the BBC, fixes 23 holes in the Windows, Mac, Linux, ChromeOS, Android, and iOS.

Adobe has, however, admitted that one exploit (CVE-2016-1010) is already in the wild, "being used in limited, targeted attacks." The company did not immediately respond to PCMag's request for comment.

In July, Flash Player was patched after a Hacking Team breach left the program vulnerable to attack. Mozilla later moved to block all versions of Flash in Firefox "by default," until Adobe released a more stable version.

Facebook in December jumped on the bandwagon, ditching Flash-based video players in favor of HTML5, a more secure framework. The social network followed Vimeo, Netflix, YouTube, and Twitch in making the switch.

Tech titan Google, which teamed up with Adobe last year to intelligently pause non-essential Flash content to preserve your computer battery, recently announced its own plan for display ads to go 100 percent HTML5.

Adobe may be down, but it's not out: Late last year, the company unveiled its intention to rename the Flash Professional CC program to Animate CC, expected to arrive sometime this year.

"While standards like HTML5 will be the Web platform of the future across all devices, Flash continues to be used in key categories like Web gaming and premium video, where new standards have yet to fully mature," Adobe said in a December statement.

Kanye West, Who Wants To Destroy The Pirate Bay , Caught Using Torrent Site

The 38-year-old rapper Kanye West is at the centre of controversy once again.

West is himself a Pirate Lover just like everyone else, and he proved it today by sharing a photo of his laptop screen on Twitter.

The rapper tweeted an ill-judged picture on Tuesday night to show what he was listening to on YouTube (Sufjan Stevens 'Death With Dignity' song), but his fans discovered something he would have hide if realized before sharing that snap.

Taking a closer look at the address bar was quite revealing, showing two very interesting tabs:

The notorious file-sharing website The Pirate Bay

MediaDownloader

West's recent album *The Life of Pablo* was involved in a piracy concern. He was so outraged when he saw his recent album was being pirated by 500,000 downloads in just two days that he considered taking legal action against The Pirate Bay.

However, in a recent tweet West accidentally revealed his own pirate habits.

It looks like the controversial rapper was torrenting a pirated copy of Xfer Records synthesizer software Serum on The Pirate Bay. The serum is a popular WaveTable editor that costs just \$189 for a license.

However, despite having harsh feelings, the Pirate Bay team said it was happy to provide West with tech support.

DJ Deadmau5, co-founder of Xfer Records, called out West as a dick and later he showed some sympathy for West, calling for a Kickstarter campaign to raise fund to help West afford a copy of Serum.

Email Inventor Ray Tomlinson Dies at 74

Ray Tomlinson, the US programmer credited with inventing email in the 1970s and choosing the "@" symbol for the messaging system, died at the age of 74, his employer said.

Tomlinson invented direct electronic messages in 1971. Before his invention, users could only write messages to others on a limited network.

"A true technology pioneer, Ray was the man who brought us email in the early days of networked computers," his employer, the defense contractor and electronics giant Raytheon, said in a statement.

"His work changed the way the world communicates and yet, for all his accomplishments, he remained humble, kind and generous with his time and talents, he will be missed by one and all."

A company spokesman said Tomlinson died on Saturday, and the cause of death was not yet confirmed.

Tributes poured in from the online world.

"Thank you, Ray Tomlinson, for inventing email and putting the @ sign on the map. #RIP," Google's Gmail team tweeted.

Vint Cerf, considered one of the fathers of the Internet who was once a manager of the US Defense Advanced Research Projects Agency (DARPA), lamented the "very sad news" of Tomlinson's passing.

When Tomlinson invented the "user@host" standard for email addresses, it was applied at DARPA's ARPANET, a US government computer network that is considered the Internet's precursor.

He was the first to use the @ symbol in this way, to distinguish a user from its host.

At the time personal computers were virtually unknown, and the use of personal email - now a keystone of electronic communications - would not be adopted at a mass scale until the 1990s.

- First message 'QWERTYUIOP'? -

Tomlinson, a graduate of the Rensselaer Polytechnic Institute and the Massachusetts Institute of Technology, detailed his creation on his blog in an attempt to prevent legend from overtaking the facts.

"The first message was sent between two machines that were literally side by side" connected only through ARPANET, Tomlinson wrote.

"I sent a number of test messages to myself from one machine to the other. The test messages were entirely forgettable and I have, therefore, forgotten them.

"Most likely the first message was QWERTYUIOP or something similar," he added, referring to the first row of letters on the traditional English-language keyboard.

"When I was satisfied that the program seemed to work, I sent a message to the rest of my group explaining how to send messages over the network. The first use of network email announced its own existence."

The international non-profit Internet Society, which promotes Internet-related education, standards and policies, said that the Internet community "has lost one of our true innovators and pioneers."

Tomlinson was inducted into the society's Internet Hall of Fame in the "innovator" category in 2012.

According to his Hall of Fame biography, Tomlinson's email software was widely distributed for years, "and proved to be an exceptionally innovative solution."

Tomlinson also played a leading role in developing the first email standards.

"I see email being used, by and large, exactly the way I envisioned," Tomlinson told the online tech publication The Verge in May 2012.

"Everybody uses it in different ways, but they use it in a way they find works for them," he said.

#in-memorial#email

When it comes to the Internet, we're all incredibly impatient. It doesn't matter that we had to wait several minutes for a single web page to load a decade and a half ago. If we can't pull up an article in an instant in 2016, it's a disaster. Google has even begun to take load speed into account when it comes to website rankings.

In other words, speed is important, which is why the latest development from MIT's Computer Science and Artificial Intelligence Lab (CSAIL) and Harvard is especially exciting.

Researchers from the two universities have banded together to develop a system known as Polaris. The system is capable of decreasing load times by 34% by overlapping the downloading of a page's objects so the whole page loads faster.

It can take up to 100 milliseconds each time a browser has to cross a mobile network to fetch a piece of data, says PhD student Ravi Netravali, who is first author on a paper about Polaris. As pages increase in complexity, they often require multiple trips that create delays that really add up. Our approach minimizes the number of round trips so that we can substantially speed up a page's load-time.

Without going into too much detail (because MIT does a fine job of that on its own website), a web page is made up of dozens of different objects. Before you enter a URL, your browser doesn't know what the site should look like. When it begins loading, the browser then has to fetch the objects from the network and decide where to put them.

What complicates this process is when certain objects require the browser to fetch dependencies—additional objects which are needed to load the original objects. It's a convoluted process, one which Polaris could assuage.

Harvard professor James Mickens uses the analogy of a traveling salesperson:

When you visit one city, you sometimes discover more cities you have to visit before going home. If someone gave you the entire list of cities ahead of time, you could plan the fastest possible route. Without the list, though, you have to discover new cities as you go, which results in unnecessary zig-zagging between far-away cities.

For a web browser, loading all of a page's objects is like visiting all of the cities, says Mickens. Polaris effectively gives you a list of all the cities before your trip actually begins. It's what allows the browser to load a webpage more quickly.

Best of all, Polaris is browser-agnostic. The team is hoping that some day soon the system will be integrated directly into browsers so that they will be able to work on further optimizations and everyone will be able to experience a faster Internet.

Google Is Hitting The Road _ Literally _ for User Feedback

Google is about to embark on an old-school search, swapping its Internet algorithm for a custom-built van that will cruise across the U.S. to find out how people use its online services and react to new features.

The white van emblazoned with Google's colorful logo and an invitation to "shape the future" of the world's most powerful Internet company is scheduled to pull out Monday on a six-week road trip.

Google is using the van to help it break out of its Silicon Valley bubble. The van will make multiday stops in seven states, stopping near colleges, libraries, parks and some of Google's own regional offices in hopes of finding out how average Americans are using the company's multitude of digital offerings.

About 500 walk-up volunteers will be invited to step inside the van designed to serve as a mini-version of Google's Silicon Valley laboratories, where most of the company's user studies are conducted.

Once inside, researchers will watch, question and record how the volunteers use apps and other services on their smartphones in sessions that will last 15 to 90 minutes. They will receive gift cards and Google t-shirts in return for their time.

A few may even get a glimpse at ideas that Google's engineers are still refining before the company decides whether to release them as products to the general public.

The plan to build a research lab on wheels grew out of Google's recognition that most people don't live and think the same way as the population living in the San Francisco Bay Area, where the company does most of its user research.

In this geeky and affluent area, the day's biggest worry sometimes boils down to how long it will take to summon an Uber ride to a fancy restaurant.

"We are trying to understand the whole end-to-end experience, which is why we are trying to get out to more locations and see more people so we can gather more context," says Laura Granka, a lead Google researcher focusing on Internet search and maps.

Google is usually in the thick of the action on people's computers and mobile devices, with seven different services boasting at least 1 billion users: Internet search, YouTube, maps, Chrome browser, Android software for mobile devices, Google Play and Gmail.

Traveling the country in search of more diverse opinions makes sense to San Diego State University marketing professor Steven Osinski, although he suspects the van's road trip is more of a goodwill tour than a data-gathering expedition.

"I don't know how much more they are going to learn that they are not aware of right now," Osinski says. "With just one van, whatever data they get is likely to be very anecdotal. It will be a good public-relations story, but it doesn't really strike me as a real game changer in terms of research."

Granka, however, says Google's marketing department didn't have any involvement with the upcoming tour.

"It is purely driven by research and our desire to reach and understand more of our users," she said.

The journey marks another step in Google's evolution from a freewheeling company that routinely introduced services with a "beta" tag to signify they hadn't been thoroughly tested.

Releasing products in test form hatched some hits, including Google News and Gmail, but it also produced some embarrassing duds. The list of flops includes a confusing document-sharing tool called Wave, a short-lived virtual world called Lively and a privacy-invading social network called Buzz.

Now, Google is taking a more deliberate approach that relies on more extensive research before its products hit the market.

In another sign of its transformation, Google last year folded itself into Alphabet Inc., a holding company that oversees many of the experimental projects, or "moonshots," that formerly came out of Google.

After leaving New York, the van will be stopping in Chapel Hill, North Carolina, from Monday through March 18; Clemson, South Carolina, March 21-22; Atlanta, March 23-25; Boulder, Colorado, April 4-8; Salt Lake City, April 11-15; Reno, Nevada, April 18-20; and South Lake Tahoe, California, April 21-22.

If the trip yields helpful insights, Google plans to send the van on several shorter junkets to cities across the country later this year and may eventually hit the road in other countries.

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